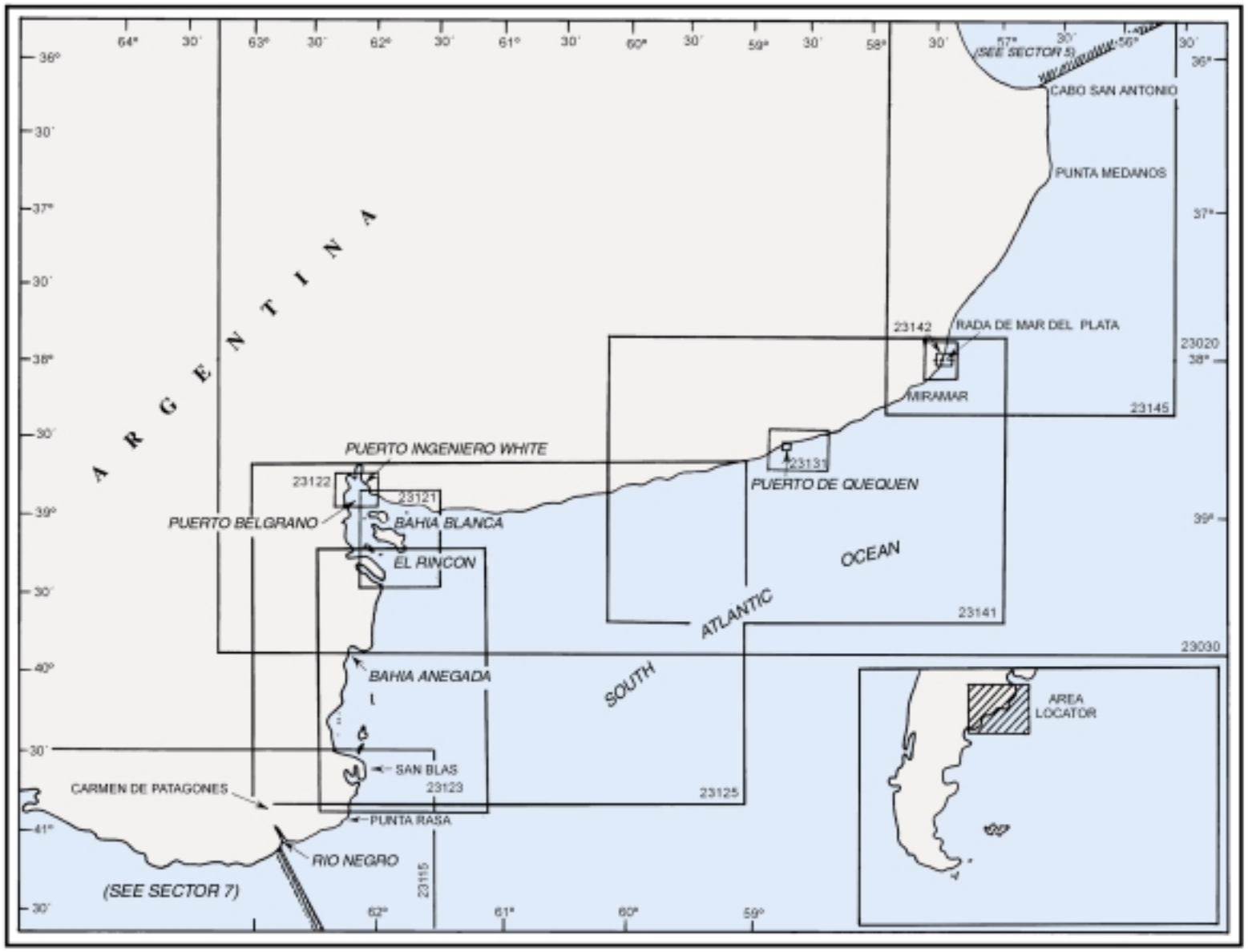

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 6 — CHART INFORMATION

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SECTOR 6

COAST OF ARGENTINA—CABO SAN ANTONIO TO RIO NEGRO

Plan.—This sector describes the coast of Argentina from **Cabo San Antonio** (36˚18'S., 56˚46'W.) as it trends S, then W to Bahia Blanca. The ports of Mar del Plata and Puerto Quequen, which are on this section of coast, are described.

Next described are El Rincon and Bahia Blanca with its collective ports of Puerto Rosales, Puerto Belgrano, Ingineiro White, Puerto Nacional, and Puerto Galvan.

Finally, the coast from Bahia Blanca is described as it trends S to Punta Rasa, then SW to **Rio Negro** (41˚02'S., 62˚47'W.).

Bahia Anegada, Bahia Union, and Rio Negro are ports of this last section.

General Remarks

6.1 Winds—Weather.—The wind direction along this section of argentine coast differs from the usual NW and SW one might expect at these latitudes, in that almost 50 percent of the winds are W. Average velocity away from shore is 15 to 17 knots with about 11 knots near the coast. Wind velocities of 31 knots or more occur on an average of 57 days a year.

Maximum monthly averages are 6 days each in July, August and December, and the minimum is 3 days in April.

There is a mean annual temperature at Puerto Belgrano of 16˚C. Mean monthly temperatures at the same place are 24˚C in January and 8˚C in June. The port has had a maximum of 43˚C in February and 38˚C or higher in other months from November to March. Extreme low temperatures of -8˚C have occurred in June and August.

South of the Rio del Plata River there are no well marked wet and dry seasons so characteristic of tropical South America, but there are some irregular modifications in rainfall amounts at different periods.

At Puerto Belgrano, for example, the warm half of the year receives about twice as much rain as the cool half.

Average annual rainfall is 510mm. Average number of days of rainfall is 53 annually, with 3 days each in winter months and 4 to 6 other months.

The highest percentages of relative humidity occur in the colder months. Saturation is highest around sunrise and lowest about 2 to 3 p.m. The mean annual relative humidity is about 60 percent at Puerto Belgno, the range being from 49 percent in December to 74 percent in June.

Puerto Belgrano has an annual average of 24 days with fog; 5 days in June; none in April.

The annual average number of thunderstorms at Puerto Belgrano is 16, ranging from 3 in December to a scattered few in June.

6.2 The NE part of the coast described in this sector, lying between **Cabo San Antonio** (36˚18'S., 56˚46'W.) and **Punta Rasa** (40˚52'S., 62˚19'W.), consists of sandy beaches backed by dunes with occasional low cliffs.

Tides—Currents.—Along the almost unbroken coast extending from **Cabo Corrientes** (38˚01'S., 57˚32'W.) to Bahia Blanca, 215 miles W, the tidal currents are very weak, though the range of the tide is about 3m.

Close inshore, between the dangerous banks of Bahia Blanca and Bahia San Blas, 100 miles S, the tidal currents run N and S at rates of 1 to 4 knots according to the wind and the age of the moon.

Between the later banks and the mouth of Rio Negro, 35 miles SW, the tidal currents are semidiurnal and regular, if not affected by the wind, and attain rates of 1 to 5 knots; these strong and dangerous tidal currents are scarcely felt 15 miles offshore.

Between Bahia San Blas and the entrance to Golfo San Matias, the tidal currents run NW with a rising tide and ESE with a failing tide at rates of 2 to 3 knots. Vessels crossing the mouth of the gulf should expect to experience a lateral drift and should exercise caution when approaching the land.

Within the gulf the tidal currents are generally weak, although the tidal range is from 4.6 to 9.1m.

Between **Punta Rasa** (40˚52'S., 62˚19'W.) and Punta San Andres, 120 miles SSW, there is a strong N current before and during S winds. Its rate varies from 1 to 3 knots. During N winds, there is a weaker S current.

Caution.—Firing danger areas exist in the vicinity of Puerto Belgrano, and there is a Submarine Exercise Area off Mar del Plata.

The SW part of the coast, which forms Golfo San Matias, is bolder and there are heights of up to 180m within 5 miles of the coast. Sierras de San Antonio, which lie 15 miles inland from the head of the gulf, rise to a height of over 500m.

This stretch of the coast includes the ports of Mar del Plata, Quequen, and the group of ports which comprise Bahia Blanca, all of which are of medium size, and the minor ports of Puerto San Blas, Rio Negro, and Puerto San Antonio, which are used only by coasting vessels and fishing craft.

The following offshore dangers exist off this section of coast:

Depths of 12m are 18 miles E and 15 miles ESE, respectively, from Cabo San Antonio.

Depths of less than 18m extend up to 20 miles offshore between Cabo San Antonio and **Mar del Plata** (38˚01'S., 57˚31'W.)

Depths of less than 9m extend up to 7 miles offshore between Punta Medanos and Mar del Plata.

Cabo San Antonio to Mar del Plata

6.3 From the NW extremity of **Cabo San Antonio** (36˚18'S., 56˚46'W.), which is marked by a light, to Punta Medanos, 36 miles S, the coast consists of a low, light-colored sandy beach, backed by a chain of dunes covered with vegetation which increase in height to 20 to 30m near the latter point.

A hill, with village, is 11 miles N of **Punta Medanos** (36˚53'S., 56˚40'W.) and is visible from 15 miles at sea.

Punta Medanos Light

A hill, which is a good radar target, lies 26 miles SW of Punta Medanos and a conspicuous 45m high hill, which is conical, is located 13 miles SW of Punta Medanos.

Costa Atlantida Argentina is the local name for the coast between Cabo San Antonio and Balneario Mar Chiquita, about 92 miles to the SSW. Along it there are the hotels and buildings of a series of seaside resorts, between which are scattered clumps of scrub.

In clear weather, this coast can be seen at 8 to 10 miles. At Balnearios Santa Teresita and Mar del Tuyu, 14.5 and 17 miles S, respectively, from San Antonio Light and at Balnearios La Lucila and Mar de Ajo, 13 and 11 miles N, respectively, of Punta Medanos, there are fishing piers from 120 to 190m long.

From 5 to 10 miles ESE of the NW extremity of Cabo San Antonio, it was found during the course of survey that there was an alteration in the nature of the bottom in two different years, though the depths remained unaltered.

This change was attributed to soft oozy mud from **Banco del Tuyu** (36˚16'S., 57˚49'W.).

Punta Medanos (36˚53'S., 56˚40'W.), marked by a light, is surrounded by shoals on which two ridges stand out.

A range of hills, about 30 to 60m high, trends NW from the point.

Bancos Medanos, with depths of less than 11m, extend up to 10 miles offshore in the vicinity of Punta Medanos.

The inner ridges are marked by discolored water and break with onshore winds. The outer ridges break in heavy weather.

There are channels between the ridges which can be used by small craft with local knowledge in calm weather.

A depth of 6.8m was reported on the bank, 6.75 miles SE of Punta Medanos.

Querandi Light (37˚28'S., 57˚07'W.) is 41 miles SW of Punta Medanos.

Anchorage.—If necessary, a vessel can anchor anywhere off this coast in a convenient depth. The holding ground is generally good, with a bottom of fine sand and shells, but there is no shelter from the strongest winds.

There is a good anchorage for small vessels within Bancos Medanos.

The best berth is with Punta Medanos Light bearing 213˚, distant about 2 miles, and about 0.7 miles offshore in a depth of 7.6m. This anchorage is sheltered by the coast from winds from between the SSW and NNW, and by Bancos Medanos from winds between the ENE and SSW, but during winds from between the latter directions, there is much swell.

If proceeding to this anchorage, use the channel between the inner ridge and the coast. The N approach is preferable. If approaching from N, steer so as to keep Punta Medanos Light bearing 213˚, and if approaching from S, so as to keep it bearing between 300˚ and 000˚.

Caution.—Depths within 14 miles of the coast between Punta Medanos and Mar del Plata are very irregular, and depths of less than 11m extend up to 7.5 miles offshore.

Vessels of deep draft should not approach within 18 miles off this coast, and vessels drawing more than 6m should not approach within 8 miles.

6.4 Laguna Mar Chiquita (37˚44'S., 57˚24'W.), entered about 21 miles SW of Querandi Light, is marked by a light 2 miles to the SW. A radio mast, 1.5 miles NE of the entrance, is prominent. The outflow from the lagoon sometimes discolors the sea 7 miles seaward of the entrance.

From Mar Chiquita to Cabo Corrientes, 15 miles SSW, the coast loses its sandy nature and rises to low cliffs 6 to 9m high, which are broken by the mouths of a few streams.

Much of the land within this coast is covered by groups of trees surrounding the ranches. A conspicuous clump of trees is 2 miles SW of Mar Chiquita. From seaward it resembles a large cone with a very wide base. The cone appears to be divided into two parts when seen from the E.

A good mark for vessels approaching from the N is a white water tower standing on a cliff about 8 miles SSW of Mar Chiquita. There is a radio mast near the tower.

Anchorage may be obtained anywhere, the holding ground being generally good. Close inshore, especially within 10 miles of Cabo Corrientes. The bottom is tufa, covered with a layer of fine sand and shells. Landing is only possible when the wind is offshore and there is no swell. There is no anchorage that would offer shelter when the most violent winds blow, that is, those from the NNE to SW.

Punta Iglesia (38˚00'S., 57˚32'W.), 1.25 miles NW of Cabo Corrientes, is formed by a rocky cliff about 9m high.

Between this point and Punta Gruta, 0.75 mile SSE, is Rambla Bristol, a bay with a smooth sandy beach in which there are some piers. Punta Gruta is rocky, about 15m high, and steep-to. Between it and Cabo Corrientes, is a bay with a beach backed by sheer cliffs up to about 50m high.

Cabo Corrientes (38˚01'S., 57˚32'W.), marked by a light, rises to an elevation of 44m, and is the SE extremity of a range extending to the W. These hills decrease gradually in height toward the sea where they end in a rocky coast, which is clear of dangers.

Between Cabo Corrientes and Punta Cantera, about 3.7 miles to the S, the coast forms a bay, the N part of which is occupied by Puerto de Mar del Plata, described below. Within it are some isolated hillocks from 30 to 50m high. Rocks, awash at LW, extend 0.5 mile E from Punta Cantera.

6.5 Mar del Plata (38˚02'S., 57˚32'W.) (World Port Index No. 13780) is primarily a resort town, but its port also has a cereal and frozen meat export trade and timber is imported. The commercial port occupies the SW part of the

area; the remaining area toward the N is reserved for the Argentina Navy and a fishing fleet center.

The Traffic Control and Safety System (CONTRASE) is in effect for Mar del Plata and is mandatory for foreign vessels over 24m long:

1. When 30 miles off, report vessel's name, flag, call sign, length, breadth, draft, speed, port of departure, destination, navigational plan, and ETAs at points listed in 3 to 5 below.
2. If anchoring outside the port, report vessel's name, flag, and call sign with the time and location.
3. When 3 miles off the end of the S breakwater, report with ETA at destination and ask "canal libre?"
4. At the waiting area report with ETA.
5. Inside of the Antepuerto report "canal liberado" (channel cleared).
6. Before shifting anchorage, berth, or moving within the port obtain permission quoting vessel's name, flag, call sign, and destination. Permission normally remains valid for 15 minutes.
7. Before leaving port, obtain permission quoting vessel's name, flag, call sign, length, breadth, draft, speed, destination, course, type of cargo, and whether there is a doctor on board. Permission remains valid for 15 minutes.
8. On departure, in the Antepuerto ask "canal libre" in the waiting area and report "canal liberado" when 30 miles off by giving vessel's name, flag, and call sign.

Tides—Currents.—Within 10 miles of Mar del Plata, the tidal currents run N and S, changing direction 3 hours after low and high water by the shore.

Their velocities are about 0.7 knot. During strong SW winds, a current sets NE at a rate of more than 1 knot. The average tidal range is about 0.9m.

Depths—Limitations.—The entrance has a depth of 7.3m, but this is subject to continual change. When calculating the depth in the entrance an allowance of 0.5 to 1m should be made for the swell.

The N and S jetties constitute the shelter structure inside which, piers, bounded by the walls of wharves, have been built. The N jetty, which is straight, is oriented on a bearing of 127˚ and is 1,100m long; the S jetty is 2,750m long, pushing out toward the NE, extending beyond the N jetty and marking the entrance to the port.

With the rising tide and winds from NNE, one can observe powerful breakers on the S jetty.

Muelle Escollera Norte, a quay on the inner side of the N breakwater, with a berthing length of 220m and depths of 9.1m alongside, is used occasionally by cruise liners.

Vessels using this berth must moor bow to the S, laying out their starboard anchor.

The Commercial (Ultramar) basin has a length of 300m along its N face and 470m along its S face. Depths in the basin range from 6.7 to 9.1m. A stranded wreck lies inside the basin.

The coastal basin, used by coasting vessels, lies S of the Commercial basin, and has depths up to 6.1m.

The head of the pier, between the coastal basin and commercial basin, has a length of 178m and a depth of 9m alongside.

The tanker pier, located E of the coastal basin, extends 0.14 mile NNE from the S breakwater and has a depth alongside of 6.7m. A small quay with two dolphins stands just N for the discharge of butane and propane to tanks inland.

Aspect.—The port is enclosed by two breakwaters, each marked at its end by a light.

A wide and conspicuous hospital surmounted by a cupola stands near the coast about 3 miles NNW of Cabo Corrientes.

A conspicuous tower, 89m high, stands 1.5 miles S of the hospital.

A prominent gray and white building, which attains an elevation of 116m, stands 0.3 mile SSE of the tower. A conspicuous white hotel, situated about 0.7 mile SW of the light on Punta Mogotes (see paragraph 6.6), is a good mark for vessels approaching from the S.

Pilotage.—Pilotage is compulsory. Pilots board 1 mile NNE of the port entrance. Vessels can enter or leave any time day or night. Vessels over 2,000 grt must use two tugs. Pilots should be requested 24 to 48 hours in advance.

Anchorage.—It is safer to lie outside in 10.9 to 12.8m if awaiting berth in the anteport. The best anchorage bears 191˚ on the S breakwater light and 313˚ on Cape Corrientes buoy, or even farther out.

Holding ground is good and winds can be ridden out even with a swell.

It has been reported that the continuous SE swell during the summer months makes anchoring outside the breakwaters very dangerous.

Caution.—Care must be taken to avoid the bank extending 0.2 mile N of the S breakwater light since it is subject to silting.

Due to silting, it has been reported (1994) that vessels should not sail E of the range line leading into Mar del Plata.

A charted Submarine Exercise Area is reported to be off Mar del Plata.

In addition, submarines operate submerged, in depths of 30m and 55m, in the area between the latitudes of Querandi Light and Quequen Light.

Mariners should proceed with caution on sighting a vessel displaying the signal NE2, which indicates the presence of a submerged submarine, or if an aircraft is observed to dive over a position near them, which has the same signification.

A smoke bomb or flare on the surface of the sea indicates that a submarine will surface in its vicinity.

Mar del Plata to Puerto Quequen

6.6 Punta Mogotes (38˚06'S., 57˚33'W.), 1 mile SW of Punta Cantera, marked by a light 0.5 mile N, is about 34m high, barren and sandy.

The point gets its name from several sandhills nearby, some of which are peaked and higher than the others and resemble cornstalks. There is a radiobeacon at the light.

A dangerous spit or rock and sand, with depths of less than 5.5m, extends 2 miles SE of Punta Mogotes.

Banco Pescadores, with a least depth of 3m, is 2.5 miles SE of Punta Mogotes and depths less than 11m extend 1 mile farther SE. The bank is made up of tufa with an obstruction.

Ensenada Mogotes (38˚07'S., 57˚35'W.) is entered between Punta Mogotes and Punta Martinez de Hoz, 4.5 miles SW.

Close W of Punta Mogotes, the coast is formed by bare and shifting sand dunes, but farther W it rises in steep cliffs 20 to

Punta Mogotes Light

30m high and partly covered with sand. This bay affords a good anchorage in depths of 18 to 22m, when the wind is offshore and there is little swell.

The cliffs continue, with elevations of about 20m as far as Punta San Andres, 3.5 miles SW of Punta Martinez de Hoz, where they terminate.

Between **Punta San Andres** (38˚12'S., 57˚40'W.) and Punta Hermengo, 10 miles WSW, the coast is rugged, sandy and barren, with a few patches of vegetation; its elevation varies from 6 to 9m, except for some isolated cliffs which are separated by gaps caused by the mouths of streams.

Four miles SW of Punta San Andres, one of these cliffs is 22m high. This coast is moderately steep-to, with depths of 9.1m about 0.5 mile offshore.

Arroyo del Durazno flows into Enseanda de Miramar 1 mile NNE of Punta Hermengo.

6.7 Miramar (38˚16'S., 57˚51'W.) is a seaside resort that has two jetties; the S jetty, which is the principal jetty, has a length of 1,192m and the N jetty has a length of 551m.

Between the jetties there is a 195m passage with a 100m wide navigable channel.

The depth of the channel is variable, therefore is reported biweekly in the Argentina Notice to Mariners; advance information is broadcast through the radio notices.

A light, 0.5 mile N of Punta Hermango, marks the town. A white church steeple rising among the red roofs of the tower, a water tower, and a concrete tank are conspicuous.

Anchorage off Miramar has good holding ground made up of chalk overlying tufa.

Caution is necessary when weighing anchor off this coast because the bottom of hard tufa is full of holes and liable to part the anchor cable.

From Punta Hermengo to Quequen, 44 miles WSW, the coast is at first backed by cliffs for a distance of about 1 mile, and then by a line of sand dunes which reach elevations of 30 to 40m in places. The coastline is broken by the mouths of a number of streams and there are occasional patches of bushes, but it is uniform and monotonous in appearance and only relieved by a few farmhouses.

At Mar del Sur, 8 miles WSW of Punta Hermengo, there is a large and prominent yellow building with a dark colored roof.

The sand dunes continue for 10 miles, with elevations of 15 to 25m, and are followed by a line of sheer cliffs about 5 miles long, beyond which there are more sand dunes.

Medano Miercoles (38˚32'S., 58˚30'W.), on the coast about 35 miles WSW of Punta Hermengo, is a sandhill, 40m high, in the form of a truncated cone which can easily be identified.

Then to the mouth of Rio Quequen Grande, 11 miles further WSW, the sand dunes vary in elevation from 20 to 30m. They are fronted by a beach consisting of hard tufa.

A shoal, with a depth of 7.3m, is 10 miles ESE of Medano Miercoles and 4.5 miles off shore.

6.8 Puerto Quequen (38˚35'S., 58˚42'W.) (World Port Index No. 13790) and the adjacent and larger town of Necochea are on the left and right banks, respectively, of Rio Quequen Grande. The main trade of the port is the export of grain and vegetable oils.

Winds—Weather.—During strong winds from between the SE and SW, breakers form at the entrance and sometimes persist up to 48 hours after the wind has fallen, making it difficult and at times, impossible to enter. Because of the surge, good fenders at least 1m thick, are often needed in the port.

Tides—Currents.—The combined effect of the S or SW winds and the greater strength of the E tidal current causes an E set along the coast.

Offshore, the currents rarely attain rates of more than 0.5 to 1 knot, and during light winds they are scarcely perceptible, but close inshore they are stronger.

In the mouth of Rio Quequen Grande, the last of the outgoing currents has been observed to attain a rate of up to 2 knots.

Depths—Limitations.—Puerto Quequen is entered through a dredged channel about 91m wide. The designed depth of the channel is 9m, but it is subject to heavy silting and cannot be relied upon; it is continually being dredged.

The following limitations are in force regarding the length and draft of vessels entering the port:

1. Length up to 175m—Draft must not exceed 8.2m.
2. Length up to 220m—Draft must not exceed 5.5m.

Vessels over 175m in length must obtain a special permit from the Maritime Prefecture before entering. The maximum vessel length admitted is 230m; vessels over 210m in length should use the channel in daylight only.

An underkeel clearance of 0.8m is recommended; this margin may be increased, depending on the height of the ground swell.

Vessels should not enter or leave the port with a ground swell in excess of 2m.

Loaded vessels should not enter the port with a ground swell in excess of 1.8m. Vessels should not enter or leave the port with wind speeds in excess of 20 knots.

When within the port, vessels should berth with their bows to seaward.

Overhead cables, with a vertical clearance of 40m, span the channel 1 mile above the harbor entrance.

Vessels cannot enter or sail at night. Two vessels cannot use the entrance channel simultaneously. There are no mooring buoys inside the breakwater, therefore it is safer for vessels awaiting berth to remain outside. Berths for oceangoing vessels have depths of up to 7m alongside.

Aspect.—A white grain elevator, over 1 mile NW of the head of the S breakwater, gives a good radar response at a distance of 20 miles. The church towers of Quequen and Necochia, lie 1 mile and 2.75 miles NW, respectively, of the S breakwater head; both are visible at about 12 miles from seaward. At night, the first lights to be sighted will be the numerous red obstruction lights shown, at elevations of about 40 to 70m, from the grain elevator and the buildings surrounding it.

Range lights lead between the breakwaters through the entrance channel.

Pilotage.—Pilotage and the use of two tugs are compulsory for vessels over 2,000 grt. The tugs have insufficient power for anything other than work within the port. Pilots board within 1.5 miles of the breakwater anytime of the day or night.

Signals.—Three vertical red lights displayed from the root of the N breakwater indicate the port is closed.

Anchorage.—Vessels can anchor in Rada Quequen, 0.4 to 0.7 mile SE of the S breakwater head in depths of 14 to 18m, fine sand and mud over tufa, good holding ground.

About 1.2 miles WSW of this breakwater head, 0.75 mile offshore, is a depth of 9m, sand and mud, but this berth is not recommended except in calm weather. The quarantine anchorage is in the roadstead.

Areas of foul ground, comprising lost anchors and cables, are about 0.3 mile E, about 0.8 mile and 0.9 mile SE, about 0.8 mile SSW, and about 2 miles ESE of the head of the S breakwater.

Due to the poor condition of the bottom, port authorities recommend that vessels anchor at least 5 miles offshore and do not deballast while at anchor.

Puerto Quequen to el Rincon

6.9 From Puerto Quequen to **Punta Asuncion** (38˚57'S., 60˚39'W.), 94 miles WSW, the coast is formed by monotonous and featureless sandhills 15 to 24m high and similar to those E of Puerto Quequen, and is broken by several streams.

Punta Negra (38˚38'S., 58˚49'W.), 6.5 miles WSW and **Punta Desnudez** (38˚50'S., 59˚46'W.), 53 miles WSW, respectively, from Puerto Quequen are both hard to identify.

Arroyo Claromeco (38˚52'S., 60˚04'W.), 13 miles W of Punta Desnudez, is marked by a light 1 mile to the E which has a signal station.

Caution.—Unexploded ordnance lies about 11 miles ESE of the light on Arroyo Claromeco.

Punta Asuncion, 30 miles W of Claromeco Light, rises to a sandhill about 37m high, but it is difficult to identify.

Sierra de la Ventana, 75 miles NW of Punta Asuncion, rises to an elevation of about 1,240m. Near its summit is a hole resembling a window. When seen from SE, the summit appears peaked, but from S it appears rather square with a notch in the middle.

El Rincon

6.10 El Rincon is the bight formed by the sudden change in direction of the coast E and S of the head of Bahia Blanca, 75 miles W of Punta Asuncion. On the N side of this bight, W of

Arroyo Claromeco Light

Punta Asuncion, shoals, with depths of less than 11m, are up to twelve miles offshore as far S as the parallel of 39˚12'S.

Inshore, the nature of the bottom is gray and black sand and shells, with tufa on some of the shoals.

For about 20 miles seaward of the shoals, the bottom is composed of mud, covered with a layer of fine sand. The holding ground is good everywhere. The nature of the bottom gives little indication of a vessel's position.

Currents are strong and under normal circumstances semidiurnal, but they are much affected by the wind. Within 10 miles of the shoals, they attain rates of up to 4 knots, and between 10 and 20 miles seaward of the outer limit of the shoals, their rates are from 1.5 to 2 knots.

Off Punta Asuncion, the N tidal current divides into two branches, one running W towards Bahia Blanca and the other running E along the coast. The currents converge from the opposite directions during the S current.

On the N shore of El Rincon, from Punta Asuncion to Monte Hermoso, a rounded hill 35m high, 47 miles W of Punta Asuncion, the coast is of the same character as it is E of Punta Asuncion.

Recalada Light (38˚59'S., 61˚16'W.), 28 miles W of Punta Asuncion, is 67m high and has a radio beacon and a signal station.

Monte Hermoso (38˚59'S., 61˚41'W.), marked by a beacon, is 20 miles W of Recalada Light.

Bahia Blanca

6.11 **Bahia Blanca** (38˚47'S., 62˚16'W.) (World Port Index No. 13815), a narrow arm of the sea in the NW part of El Rincon, is entered between Monte Hermoso and Punta Lobos, 17 miles SSW. It extends 40 miles NW and is obstructed by banks and shoals.

Within the bay and in order from seaward are Puerto Rosales, Puerto Belgrano, Puerto Ingineiro White, Puerto Nacional, Puerto Galvan, and Puerto Cuatereros, all of which are known collectively as Bahia Blanca.

There is a Traffic Control and Safety System (CONTRASE) in place for Bahia Blanca. It is mandatory for foreign vessels over 24m long. It operates 24 hours on channel 16.

If anchoring outside the port, report vessel's name, flag, and call sign with the time and location.

When approaching Rincon lighted buoy, on entry, report vessel's name, flag, call sign, length, breadth, draft, speed, port of departure, destination, navigational plan, and ETAs at points listed below. Report any later changes to ETAs.

Report with ETA at destination, on reaching: Rincon lighted buoy, lighted buoy No. 4, lighted buoys 11, 17, 22, and 25, Beacon No. 2 (Ingeniero White Channel), and the roadstead (departing vessels omit the roadstead report).

Before shifting anchorage, berth, or moving within the port obtain permission, quoting vessel's name, flag, call sign, and destination. Permission normally remains valid for 15 minutes.

Before casting off, on leaving port, obtain permission, quoting vessel's name, flag, call sign, length, breadth, draft, speed, destination, course, type of cargo, and whether there is a doctor on board.

Between Monte Hermoso and the entrance to Puerto Rosales, 18.5 miles W, the shore of Bahia Blanca consists of low sandhills partly covered with bushes and coarse grass.

6.12 Punta Tejada (38˚59'S., 61˚49'W.), 6 miles W of Monte Hermoso, is marked by a light.

Chica Light is 4 miles W of Punta Tejada. Tripode Beacon is 6 miles WNW of Punta Tejada. A charted Degaussing Range is 1.5 miles SW of Tripode Beacon and only Argentine Naval vessels may navigate vessels near the buoy marking range. Merchant ships must pass SW of the range.

Water towers are 0.6 mile NW and 1.75 miles WNW, respectively, from Tripode Beacon.

Punta Ancla Beacon, marking a poorly defined point, is about 3 miles WNW of Tripode Beacon. Other uncharted beacons used by the Argentine Navy are also along this stretch of coast.

The most prominent hummocks W of Punta Hermoso are 1 mile ENE of Punta Ancla Beacon. There are also some groups of trees, flag staffs, and windmills in this vicinity.

The S side of the seaward part of Bahia Blanca, is formed by Isla Trinidad which extends 14.5 miles NW from Punta Lobos, and by Isla Bermejo and Islas del Embudo NW of it.

These islands are low and subject to inundation, and are difficult to identify from the offshore.

Isla Trinidad and Isla Bermejo are separated by Canal Bermejo which is navigable by small craft with local knowledge for a distance of about 20 miles. Isla Bermejo and Islas del Embudo are separated by Arroyo Labrode, and Canal del Embudo separates the later islands from the mainland.

The middle of Bahia Blanca is encumbered with numerous sandbanks which include: Banco del Norte, Banco Nuevo, and Banco del Medio lying near the entrance to the bay, and Banco Largo, Banco del Oeste, Banco del Sur, Banco del Toro, Banco Redondo, and Banco Cuchillo lying farther in. These banks are composed of very hard black sand, with fine sand and mud in the channels between them.

The outer banks have depths of 3 to 5.5m; the inner banks dry in patches. The sea sometimes breaks over the edges of these banks, but at other times there is little indication of them.

Canal Principal, the main route into Bahia Blanca, is well-marked and leads from about 39˚24'S, 61˚29'W, to a point about 2 miles W of Puerto Rosales where the channel becomes Canal Ingeneiro White. The controlling depth in Canal Principal is 12.8m, while the controlling depth in Canal Ingeneiro White is 12.3m.

Caution should be exercised as the buoys may be unlit and out of position.

Canal Auxilar, branching N from Canal Principal and passing between Banco del Norte and Banco del Oeste, has a depth of about 3.4m. It is no longer dredged and its use is not recommended except for small shallow-draft vessels.

Canal del Sur, branching W from Canal Principal and passing SW of Banco del Sur, Banco Redondo, and Banco Cuchillo, has depths of about 3.6m, but it is not recommended because it is unmarked and has not been surveyed recently.

Anchorage.—Four anchorage areas, designated Zones A, B, C, and D, the limits of which are shown on the area chart, are established for merchant vessels. Caution is necessary as foul areas and obstructions are located in the charted anchorage areas.

Anchorage Zone A lies close N of Canal Principal, the main channel, between Banco Norte and Banco Del Medio , in depths from 10.5 to 12m. Vessels should anchor keeping at least 500m away from the channel axis.

Anchorage Zone B lies close NW of Zone A

Anchorage Zone C, lying 2.5 miles N of Zone B, has depths of 10 to 17m, but caution must be exercised as several charted foul areas lie in this anchorage.

Anchorage Zone B lies about 5 miles further NW in depths of 10 to 22m.

The charted depths in Anchorage D are from 10 to 17m. Caution should be exercised to avoid anchorage or navigating in the area W of Zone C during an artillery practice in Rada De Monte Hermoso area, dates and time of such exercises are prolmogated Argentine Coast Guard.

Controlling depths in the other anchorages are, as follows:

1. Roadstead A 9.7m
2. Roadstead B 10.9m
3. Roadstead C 10.5m

It was reported (1998) that Roadstead A has been dredged to a depth of 14m.

Vessels in quarantine should anchor in the roadstead to the W of the Naval anchorage (see below), or off Punta Pipas Beacon.

Rada de Puerto Belgrano, the roadstead NW of the merchant ships anchorage and to the S of the port of that name, is reserved for the use of the Argentine Navy.

Vessels proceeding only to Puerto Rosales or Puerto Belgrano, or in cases of emergency, may anchor in a position 1.5 miles SSE of Punta Ciguena, provided notice is given by radio and by flag signals, of their name, nationality, destination, and port of departure.

A prohibited area, the limits of which are shown on the chart, extends ESE about 9 miles from the vicinity of Punta Tejada.

The coast between Chica Light and Punta Giguena and between Puerto Rosales and a point 7.25 miles NW is a military area and landing on this stretch of coast is prohibited.

Tides—Currents.—The flood tidal current runs for 5 hours 45 minutes and the ebb current runs for 5 hours 30 minutes. The normal rate is less than 2 knots, but this may be increased to 4 knots by the action of the wind.

The tidal currents set across the outer part of Canal Principal, and caution is necessary. In the narrow part of this channel, between the two parts of Banco del Este, the tidal currents are very strong, but here and in the inner part of the channel they follow the trend of the channel.

The greatest rates, which attain 2.5 knots, are found in the vicinity of Punta Ancla. They occur about 3 hours 30 minutes after high and LW at Puerto Belgrano.

Off Puerto Belgrano, the beginning of the flood current is stronger on the S side of the roadstead, and the beginning of the ebb current is stronger on the N side.

The water level in Bahia Blanca varies frequently from the predicted tidal level. In general, strong winds from the WNW through N to NNE lower the water level, while those from the E through S to W raise the level. With gale force winds the level may be raised or lowered as much as 1.5m.

The full effect may be experienced at any interval up to 5 hours after the start of the gale, the average interval being about 3 hours.

Directions.—If approaching from the E, obtain an accurate fix and then steer for the buoyed Canal Principal entrance.

Until a fix has been obtained, sound continuously and do not proceed into depths of less than 18m, as the shoals and banks are extensive and steep-to, the tidal currents are sometimes strong and affected by the wind, and the coast is low.

Recalada Light (39˚00'S., 61˚16'W.), Punta Lobos Beacon, and Sierra de la Ventana are good marks in clear weather.

If bound from the S, make a landfall between Recalada Light structure and Monte Hermoso beacon, thereby sighting the buoy marking the Canal Principal entrance.

If arriving at night or in thick weather and uncertain of the position, and if soundings of less than 18m are obtained, a vessel should anchor.

The best times for entering is the beginning of the flood current, because the edges of the banks are then most clearly distinguished.

By following the track indicated on the chart and being guided by the lighted buoys, no great difficulty should be experienced. It should be observed that SE winds cause a heavy sea. At such times or during fog or poor visibility, either anchor or stand off.

Regulations.—Vessels drawing over 10.7m should not overtake or pass other vessels anywhere in the channel. Vessels drawing between 9.2 and 10.7m should not overtake other vessels between buoys 13 and 16, or upstream of buoy 26 in position 38˚53.3'S, 62˚10.9'W.

Vessels traveling with the current have the right-of-way over other vessels; if there is no current, outbound vessels have the right-of-way over inbound vessels. Speed in the channel should not exceed 12 knots.

Pilotage.—Pilotage is compulsory. Pilots board vessels near lighted buoy No. 11, 9.5 miles SW of Monte Hermoso, between the hours of 0300 and 2100, pilot should be requested at least 24 hours in advance.

Requests for a pilot should include the vessel's name, nationality and identification signal, number of passengers and crew, type and quantity of cargo, and information regarding the health of passengers and crew.

A vessel requiring a pilot can communicate with the Subprefectura Maritime at one of the above-mentioned ports through Bahia Blanca radio station or by radio with the pilot vessel only when away from her base. The pilot vessel is an Argentine Naval tug based at Puerto Belgrano, and does not leave that port unless a vessel is expected.

6.13 Puerto Rosales (38˚55'S., 62˚04'W.) (World Port Index No. 13800), a former grain port no longer used as such, is being converted into a fishing port which will have depths of 6.1m alongside.

Ciguena Oil Terminal (38˚57'S., 62˚02'W.) consists of a large mooring buoy with a submarine pipeline and is located 1.25 miles SE of the head of the Puerto Rosales breakwater.

6.14 Puerto Belgrano (38˚53'S., 62˚06'W.) (World Port Index No. 13810) is primarily an Argentine Naval Base, but the drydocks can be used by merchant vessels.

The largest drydock is 234m long, 34.2m wide, and 13.1m deep. The Argentine Hydrographic Department is here.

Depths—Limitations.—The port is approached through a channel 0.8 mile WNW of Puerto Rosales Light. The minimum width of the channel at its inner end is 75m.

The basin between Muelle B and Muelle C has depths of 3.7 to 7m alongside its quays. The inner basin, enclosed by Muelle A and Muelle B, has depths of 5.8 to 9.4m, except along the quay at its SE corner, where there are depths alongside of only 2.4 to 4.6m.

Aspect.—A signal station, a large building with a clock tower and flag staff on a hillock on the E side of the port, is a prominent landmark visible at 15 miles in clear weather.

Pilotage.—Pilotage, which is compulsory, is by military pilots who take over from civil pilots at lighted buoys No. 21.

Signals.—The following day signals, indicating the movement of shipping, are displayed from a mast with a yard, situated on the head of Muelle C:

Signal	Meaning
Black flag at W yardarm	Vessel in sight.
Flag "L" at the dip, at W yardarm	Vessel entering.
Flag "K" at the dip, at W yardarm	Vessel leaving.
Red flag at the dip, at W yardarm	Entry prohibited.
Red flag at E yardarm	Vessel is in need of assistance.
Black flag at the dip, at E yardarm	Departure prohibited.

The following night signals are shown from the signal station:

Signal	Meaning
One intense green light	Entry prohibited.
Two intense lights, vertically disposed, white over green	Departure prohibited.
Two intense green lights, vertically disposed	Entry and departure prohibited.

Puerto Ingeneiro White—Terminal Bahia Blanca

Regulations.—Except by special authority, large vessels are not allowed to enter at night. All vessels entering or leaving must, when abreast of Puerto Belgrano, display their numbers by the International Code of Signals.

The following signals are displayed at the Fleet Airbase flag staff when aircraft are operating:

1. By day—Two "Y" flags.
2. By night—Vertical red, white, red lights.

Caution.—A seaplane harbor, enclosed by breakwaters, is close N of the dockyard. An area reserved for the use of seaplanes landing or maneuvering extends 1.75 miles offshore and 2.5 miles NNW of the dockyard. Passage through the area is prohibited without the permission of the Officer Commanding the Fleet Airbase through the Servicio de Puerto.

Puerto Ingeniero White and Adjacent Ports

6.15 The inner group of ports in Bahia Blanca is made up of Puerto Ingeniero White, Puerto National, and Puerto Galvan, all on the N side of the channel between 10 to 12 miles NW of Puerto Belgrano.

This inner group of ports is approached through Canal Ingeniero White, a continuation of Canal Principal, a marked channel dredged to 10m.

Rada Ingeniero White is the part of the fairway between the mouth of **Arroya Naposta** (38˚47'N., 62˚14'W.) and the wharf at Puerto Galvan. It was dredged to a depth of 12m.

Tidal currents in Canal Ingeniero White have rates of 1 to 3 knots and follow the trend of the channel.

Pilotage is compulsory. Harbor pilots who require 24 hours notice take over from channel pilots in the roadstead. Tugs are compulsory at certain berths.

6.16 Puerto Ingeniero White (38˚48'S., 62˚16'W.) (World Port Index No. 13820) is an important grain exporting port, but also has facilities for handling general cargo. It can handle vessels up to 9.7m draft when dredged and may silt.

A foul area extends 0.25 mile SE. It has been reported that Muelle de Hierro is no longer present. The pier is removed and the area dredged to 10m.

Muelle Elevador Este and Muelle Elevador Central, each of which has four berths for ocean-going vessels, project SSE from the shore and both piers are equipped for loading grain.

There is a quay, 250m long, inshore of the remains of the E arm of Muelle de Hierro. A jetty is reported to lie along the N bank.

The Subprefectura Maritime maintains Notices to Mariners for all parts of the world.

6.17 Puerto Nacional (38˚48'S., 62˚17'W.) (World Port Index No. 13830), state-owned, is close W of Puerto Ingeniero White and is used mainly for the export of fruit. The port consists of a basin with about 600m of quayage, having depths from 4.3 to 6.1m alongside. Services are much the same as at Puerto Ingeniero White.

6.18 Puerto Galvan (38˚47'S., 62˚18'W.) (World Port Index No. 13840), mainly used for the import of oil, also handles grain and lies 1.5 miles W of Puerto Ingeniero White.

The main wharf, an irregularly-shaped structure which projects 0.7 mile SSE from the shore, has nine berths. The outer berths, numbered 2 through 6, had depths alongside of 3.4 to 6.3m, but the inner berths have less water.

The tanker pier, a T-shaped structure which projects SW from the root of the main pier, was dredged to a depth of 12m, but was reported more recently to have a depth of 8.8m alongside. Lights are shown from each end of the pier.

Other services are much the same as Puerto Ingeniero White.

Puerto Galvan

Ciudad de Bahia Blanca (38˚44'S., 62˚16'W.) is inland, 3 miles N of Puerto Ingeniero White. It is the most important Argentine city S of Buenos Aires.

Bahia Blanca to Rio Negro

6.19 Costa Laberinto lies SW of Isla Trinidad and extends to Punta Laberinto, 15 miles SSW of **Punta Lobos** (39˚14'S., 61˚52'W.). It includes Bahia Falsa, Bahia Verde, Peninsula Verde, Celeta Brightman, and various islands. It is fringed to a distance of 7 miles by numerous banks and shoals which are intersected by navigable channels.

Navigation precautions and tidal currents in this area have been discussed previously under Bahia Blanca.

El Rincon Light (39˚24'S., 62˚01'W.), 62m high and equipped with a radiobeacon, is on the E end of Peninsula Verde, 11 miles S of Punta Lobos.

Bahia Falsa separates Isla Trinidad from Isla Ariadna and Isla Wood, which lie SW. It is entered between Punta Lobos and the bank extending E from Isla Ariadna, 5 miles S, and extends 15 miles NNW. This inlet affords excellent anchorage, with protection from all except SE winds, which raise a sea, but local knowledge is essential for entering it because no landmarks are visible until a vessel is within the banks which encumber the entrance.

Bahia Verde, entered between the bank extending E from Isla Ariadna and the NE extremity of Peninsula Verde, extends 10 miles WNW.

Local knowledge is essential because the entrance is encumbered by banks.

El Rincon Light

Bancos Lobos, with depths of less than 5.5m, extend 8 miles SSE from Punta Lobos. Depths are very irregular and they dry in parts.

Bancos La Paz, with depths of 1.2 to 5.5m, are from 6 to 13 miles S of Punta Lobos. Because the coast of Peninsula Verde is visible from the vicinity of these banks, they are more easily avoided than Bancos Lobos.

The E sides of all the above banks are shelving and their W sides are steep-to.

Bajos del Laberinto, which dry in places, are between the E ends of Bahia Falsa and Peninsula Verde, obstructing the entrance to Bahia Verde; they extend 6 miles ESE from **Isla Ariadna** (39˚15'S., 62˚01'W.).

There are two channels into Bahia Falsa. Canal del Este, between Bancos Lobos and Bancos La Paz, has a least depth of about 3.6m in the fairway.

Canal Patagonia, which is 1 mile wide, leads W of Bancos La Paz and Bancos Lobos and E of Bancos Patagonia, which fringe the coast of Peninsula Verde.

It has a least depth of 9.8m in the fairway in the S part, and of about 5m at its N end where it turns E into Canal del Este, 6 miles NE of El Rincon Light.

The entrance to Bahia Falsa is narrowed by a shoal, with a least depth of 0.6m, which forms the NW end of Bancos Lobos.

This passage is about 0.5 mile wide, with depths from 4.9 to 5.2m. A buoy marks the channel 1.75 miles WSW of Punta Lobos.

6.20 Caleta Brightman (39˚26'S., 62˚02'W.), an inlet between the S end of Peninsula Verde and Punta Laberinto, has a narrow channel with depths of 3m, but should only be entered with local knowledge.

Currents run parallel with the coast outside the entrance. Within the inlet, they attain rates of 4 to 5 knots. The water level is much affected by SE and NW winds.

If approaching this inlet, do not proceed N of 39˚30'S, as the dangerous banks are N of that parallel, while the coast to the S is clear of dangers.

Anchorage may be obtained in a depth of 6m, about 1 mile NNE of Punta Laberinto.

Vessels can also anchor near the SW coast of Peninsula Verde in a depth of 10m, soft sandy mud.

From Punta Laberinto to the mouth of the S and main branch of Rio Colorado, 25 miles S, the W coast of El Rincon consists of a low sandy beach, backed by a chain of sandhills, 9 to 12m high, which end at this river mouth.

Rio Colorado flows into the sea by two branches which divide 18 miles inland. The mouth of the N branch is located 10 miles S of Punta Laberinto.

A bank of sand and mud dries up to 1 mile off this shore, and the depths of it decrease gradually; the sea breaks on it heavily, making landing difficult.

Bahia Anegada, between **Isla Margarita** (39˚52'S., 62˚07'W.) and Punta Rubia, 50 miles to the S, is filled mostly by drying banks with channels and inlets in between which are navigable only by small craft with local knowledge. There are many low islands and islets in the bay, all with the same appearance.

6.21 Bahia Union (39˚58'S., 62˚08'W.), in the N part of Bahia Anegada, is entered through the banks 15 miles SSE of Isla Margarita. The entrance is 0.7 mile wide with 4.6m over the bar. Bahia Union affords good anchorage with complete protection once inside for vessels drawing up to 6m and is the base of a fishing fleet.

At the entrance of Bahia Union the flood current runs N across the banks at about 2 knots, and the ebb currents at first run directly out of the inlet at about 2.5 to 3 knots and then turn S as it clears Banco Perro.

Winds from N decrease the rate of the flood currents and increase the rate of the ebb currents. South winds have the opposite effect.

Islote Morro Indio, N of Bahia Union Inlet, is 6m high and easily identified because the land in the vicinity is barely above sea level at HW. Three sand hills 2 miles NNW of Islote Morro Indio are good landmarks.

Directions.—If bound into Bahia Union, make the land in the vicinity of Isla Margarita, where there are no off-lying dangers and sounding will give a good indication of distance offshore. The beacon on Isla Margarita and the three sandhills mentioned above, are all good marks, but because the tidal currents sometimes set across the channel, do not attempt to enter with out local knowledge.

Anchorage may be obtained with Islote Morro Indio bearing 347˚, distant 0.75 miles in a depth of 7.3m mud and pebbles.

Sandy banks and shoals extend up to 15 miles seaward of the islands in Bahia Anegada. Some of them dry as much as about 2.4m.

At HW, very little dry land can be distinguished from seaward of these dangers. They should be given a wide berth, especially by ships bound N, because the N tidal current sets NW towards them at rates of 1 to 3 knots.

The shoals are formed in ridges, lying parallel with the coast, with depths of 2.7 to 11m, and of 14.6 to 22m between them. In calm weather, in addition to soundings, the only indications of these shoals are a slight rippling or an unusual smoothness and some difference in the color of the water.

When there is much swell, the sea breaks over nearly all these shoals, even those with as much as 7 or 9m.

Currents off the above-mentioned dangers run NNW and SSE at rates of 1 to 2 knots; over the dangers, they run NW and SE at the same rates. Between the dangers, the current follow the directions of the channels and te rates increase from 1.5 to 3 knots.

Winds from between the SE and SW raise the water level and increase the rate and duration of the N current. Winds from between the NW and N have the opposite effect.

6.22 Puerto San Blas (40˚34'S., 62˚14'W.) (World Port Index No. 13860) is a small fishing village on Bahia San Blas at the S end of Bahia Anegada. The entrance to the bay and port is almost closed by extensive banks which cause tidal currents in the channels between them.

Inside the entrance there is a sheltered harbor for small vessels able to enter. The tower of a church, 12m high, is prominent.

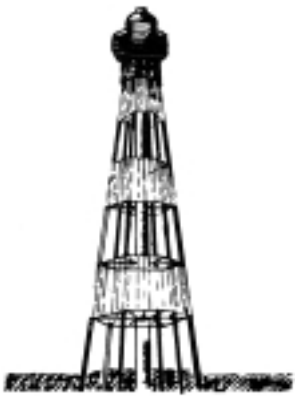
From the entrance to Bahia San Blas to **Punta Rasa** (40˚52'S., 62˚19'W.), 18 miles SSW, the coast consists of a narrow sandy beach, backed by low and uniform sandhills with sparse vegetation consisting of coarse grass and a few bushes.

The only prominent feature is Cerro de la Torre, a conical sandhill near Punta Rubia. Segunda Barranca Light, nearly midway between it and Punta Rasa, is difficult to distinguish.

Segunda Barranca Light (40˚47'S., 62˚16'W.) is 34m high. A radiobeacon is at the light.

A bank of tufa, with irregular depths of less than 5.5m, extends up to 1.5 miles off the coast between Segunda Barranca Light structure and Punta Rasa. In calm weather its edge is marked by tide rips.

Anchorage, sheltered from offshore winds, may be obtained 3 miles NE of Segunda Barranca Light.



Segunda Barranca Light

6.23 Punta Rasa (40˚42'S., 62˚18'W.) rises to a rounded sandy hillock, 8m high. In its vicinity are sandhills which change shape under the influence of strong winds.

From Punta Rasa, the coast trends WSW for 21 miles to Barranca Norte, and is visible about 11 miles offshore in clear weather. It is of uniform aspect and formed by shifting sand dunes covered with vegetation.

Barranca Norte (41˚01'S., 62˚41'W.), about 20m high, is prominent from the E, but is difficult to identify from any other direction because it is seen against a background of mountains.

There are no dangers off this part of the coast, and vessels can anchor anywhere off it.

From Barranca Norte to Punta Redonda, the E entrance point of Rio Negro, 7 miles WSW, the coastal sand dunes are bare and become lower.

Between **Punta Rubia** (40˚44'S., 62˚14'W.) and **Bahia Rosas** (41˚09'S., 63˚24'W.), 60 miles to the WSW, run parallel with the coast. They attain rates of 1 to 3 knots between Punta Rubia and Punta Rasa. These currents area affected in strength, and to a certain extent in direction, by strong winds.

Heavy overfalls, which can be dangerous to small craft, are likely to be encountered near the coast between Punta Rasa and the mouth of Rio Negro, when the current sets against the wind at a certain angle.

6.24 Rio Negro (41˚02'S., 62˚47'W.), entered between Punta Redonda and Punta Medano 1.25 miles WNW, is navigable by vessels of shallow draft with local knowledge as far as Puerto Carmen de Patagones, a fishing port, 17 miles above its mouth.

Above this port the depths become irregular and the river is navigable only by boats. The tides are felt about 25 miles above the port.

The mouth of the river is easily identified by Barranca Norte and Barranca Sur. Its banks are from 9 to 15m high. During floods, discolored water extends as much as 8 miles offshore in the vicinity of the river mouth.

6.25 Punta Redonda (41˚02'S., 62˚46'W.) rises to a conical sandhill, 8m high, which appears from the E to have three summits partly covered with vegetation. About 0.5 mile NW of it the sandhills are about 15m high.

Punta Medano, the SW entrance point of the river, lies almost 1.5 miles WNW of Punta Redonda and is bare and sandy. It is inundated during floods, when the entrance appears three times its normal width. The point is steep-to on its NE side.

Rio Negro Light, 16m high, is 2.75 miles SW of Punta Medano.

Banks, which dry in parts, extend up to 1.75 miles off the coast E of Punta Redonda and join the SE end of Banco Miguel, a drying bank forming a bar across the mouth of Rio Negro. They are composed of fine sand and shells, and are continually changing. Their edges are nearly always indicated by broken water.

The bar can be crossed by vessels drawing less than 2.4m at HWS. A vessel entering with a greater draft is liable to be detained in the river for several weeks before being able to recross the bar.

The bar is dangerous during onshore winds, which when strong, may make passage over it impossible. With any swell, there are breakers over the whole of it and in the channel within. Smooth water is rare on this exposed coast. A shoal, composed of tufa with depths of less than 5.5m, extends up to 1.5 miles offshore, 3 miles SW of Rio Negro light.

Less water than charted was reported in the approaches to Rio Negro.

There are depths of about 13m 5 miles S of Rio Negro light.

Pilotage.—No pilots were reported available.

Anchorage.—Anchorage can be obtained with Rio Negro Light bearing 310˚, distant 2.5 miles in 14m, fine sand.

While this is a good anchorage with winds from the W to N, it should be vacated as soon as the winds threaten to blow strongly from E or S.

No attempt should be made to anchor in depths of less than 9m or with the light bearing more than 000˚, because the bottom is tufa and is poor holding ground. Winds from the S raise the sea and cause a NE current.

An obstruction, a lost anchor and cable, is about 0.5 mile NNW of this anchorage.

The port of **Puerto Carmen de Patagones** (40˚48'S., 62˚59'W.) (World Port Index No. 13870) is used almost entirely by fishing craft and other small vessels with local knowledge. There is a hospital in the town.

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